



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,282	02/20/2001	Roger G. Etter	ENV1298-0021	4587

8698 7590 06/11/2003
STANDLEY & GILCREST LLP
495 METRO PLACE SOUTH
SUITE 210
DUBLIN, OH 43017

EXAMINER

YILDIRIM, BEKIR L

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 06/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,282

Applicant(s)

ETTER, ROGER G

Examiner

Bekir L. YILDIRIM

Art Unit

1764

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3,4,8,9 and 15-76 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,8,9,15-18 and 34-76 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 19-33 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: ____.

Art Unit: 1764

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyers (USP 3917564) in view of the conventional knowledge in the art.

Meyers (USP 3917564) teaches a process for making regular coke, wherein sludges and other organic by-products of industrial and community activity which present difficulties due to the presence of dispersed solids are put to useful purpose upon injection of such by-products diluted with added water to a delayed coker as aqueous quench medium (abstract). The exemplified cokes produced may have VCM of as high as 20% (see examples 3-5).

It is acknowledged that Meyers does not mention spongy porous or adsorptive properties of its coke. It would have been obvious however to one having ordinary skill in the art that, in the absence of Myers disclosing otherwise, the process described therein would be expected to produce regular or "sponge" coke, the normal product of the delayed coking process. See for

Art Unit: 1764

example the following references for the definition and description of such cokes:

LeCours et al. (USP6,024,863) col. 5, lines 22-30, 63-68.

Greenwalt (USP 5,259,864), col. 1, lines 35-45.

Ohshol et al. (USP 5,954,949) col. 1, line 65 - col. 2, line 20).

Adams et al. (USP 5,110,448) col. 1, lines 33-40.

Kapner et al. (USP 4,406,872) col. 1, lines 28-38.

Hsu et al. (USP 4,291,008) col. 3, lines 44-49.

Adams et al. (USP 5,110,448) col. 1, lines 29-40

3. Claims 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shroeder (USP 3,960,701) or Zse et al. (USP 4,326,853) or Grindstaff et al. (USP 4,369,171) or Schlinger et al. (USP 3,852,047) or Hayashi et al., each in view of Meyers (USP 3917564), Scalliet (USP 6,056,882), Bartilucci et al. (USP 4,874,505) and Yan (USP 4, 096,097).

Shroeder (USP 3,960,701) teaches the conversion of non-coking coals into coking coals, by eliminating or reducing sulfur and oxygen in the coking structure and adding hydrogen, wherein the coke product have VCM content of 10-25 % and the product can be calcined to make metallurgical grade coke (col. 2, lines 19-34, col. 2, line 65 - col. 3, line 2).

Zse et al. (USP 4,326,853) teaches a delayed coking process to make regular petroleum coke, which has a VCM content of 16-30%. (see abstract).

Grindstaff et al. (USP 4,369,171) teaches regular cokes with volatile combustibile matter contents of 8.8-21.8 % (Table 1).

Schlinger et al. (USP 3,852,047) teaches an improvement to regular coke making process by delayed coking wherein calcinable regular or "sponge" petroleum coke clusters having VCM of 8-29.5% are formed (Table II, col. 10, lines 55-58).

Hayashi et al. teaches a regular grade, or "sponge" coke having volatile matter content of 8-20 % (see claim 6).

It is acknowledged that none of the Shroeder et al., Zse et al., Schlinger et al., Grindstaff et al. Or Hayashi et al. references teach the step of adding "additives" during the quench cycle.

Meyers (USP 3917564) teaches a process for making regular coke, wherein sludges and other organic by-products of industrial and community activity which present difficulties due to the presence of dispersed solids are put to useful purpose upon injection of such by-products diluted with added water to a delayed coker as aqueous quench medium (abstract). The exemplified cokes produced may have VCM of as high as 20% (see examples 3-5).

Scalliet (USP 6,056,882) also teaches the addition of industrial wastes and sludges to coker quench streams of delayed coking vessel (col. 6, lines 37-46).

Bartilucci et al. (USP 4,874,505) teaches a process for making regular cokes wherein high oil content sludges are added during coking cycle while the low oil content sludges are introduced during the quench cycle (see Table 1).

Yan (USP 4, 096,097) teaches a method for producing high quality "sponge coke" or not to make soot coke wherein, it is disclosed that the addition of 0.5 to 20 percent by weight of an oxygen-containing, carbonaceous material which decomposes under coking conditions, to delayed coker fresh and/or recycle feed promotes the formation of sponge coke. The oxygen-containing, carbonaceous additives are selected from comminuted coal and lignite materials such as bagasse, sugar beet waste, sawdust and other cellulosic wastes (see col. 3, lines 30-60).

It would have been obvious then to produce the sponge coke or regular coke in any of the

It would have been obvious then to modify the coking processes of Shroeder et al., Zse et al., Grindstaff et al., Schlinger et al., or Hayashi et al. As suggested by Meyers et al. Scalliet et al., Bartilucci et al. or Yan, by introducing the sludge or waste materials, during the quench cycle or prior thereto, for et least the self-evident benefit of disposing of

environmentally hazardous waste materials, while still meeting the coke quality requirements.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 19-33 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of U.S. Patent No. 6,168,709 in view of Meyers (USP 3917564), Scalliet (USP 6,056,882) or Bartilucci et al. (USP 4,874,505).

Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to essentially the same coking process with the exception of the addition to the quench cycle which is disclosed in the secondary references as discussed above.

6. Claims 19-33 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of copending Application No. 09/763,282.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are directed to essentially the same coking process with the specification of various waste materials, i.e. the recitation of plastic wastes here. The

invention as a whole would have been obvious to one having ordinary skill in the art since both sets of additives have common elements, e.g. wood wastes.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments


7. Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bekir L. YILDIRIM whose telephone number is (703) 308-3586. The examiner can normally be reached on 10:30-8:00 (alternating Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3599 for regular communications and (703) 872-9467 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0611.

BLY
June 2, 2003


Bekir L. Yildirim
Primary Examiner